

DISPLAY BOARD FOR TABLET DISPENSERS

Field of the Invention

This invention relates to apparatus for displaying tablet dispensers and, more particularly, to a display board for displaying fanciful containers for storing candies in
5 tablet form.

Background of the Invention

The present invention relates to means for displaying fanciful tablet dispensers such as the well-known tablet dispensers used to dispense PEZ® candies.

PEZ® candy dispensers typically comprise an exterior housing and a tablet
10 storage receptacle coaxially displaceably mounted in the housing. The storage receptacle includes a spring biased to press a stack of tablets stored in the receptacle upwardly towards a dispensing end of the receptacle. The housing itself can take various shapes. When the receptacle is filled with a stack of tablets, the uppermost tablet is disposed in a dispensing position above the housing and between two upwardly
15 extending side wall portions of the receptacle. A cover for the receptacle carries a fancifully designed handle portion. The handle portion is designed to operate using one finger of a hand, for instance, the thumb if desired, to pivot the cover about a transverse axis to bring the cover into an open position exposing the uppermost tablet, which then rests in a dispensing position. Tablet dispensers contemplated by the present invention
20 have been disclosed in U.S. Patents Nos. 4,295,579, 4,966,305 and 5,984,285, all of whose disclosures are herein incorporated by reference.

The housing, tablet storage receptacle and associated mechanism are all standard. The housings and handle portions are what differ as between different dispensers. The handle portions are often designed to replicate well known figures,
25 such as Santa Claus, and literally hundreds of such designs have been provided.

Inasmuch as children constitute the major consumers of PEZ® candy tablets, it is natural that they would want to collect containers comprising different housing and handle portion designs. A further natural outgrowth is that the children would want to

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display their collections, particularly on display boards capable of being mounted on a wall.

There have been previous attempts to fill this need. A wall-mount display board suitable for displaying BARBIE®-type dolls is disclosed in U.S. Patent No. 5,398,820.

5 The dolls are held by M-shaped doll grips provided with snap- or press fit members suitable for being snap-fitted in apertures in the display board itself. The press fit members on the doll grips, however, often permit the dolls being displayed to rotate or otherwise move with respect to the display board.

It is thus the primary object of the present invention to provide a convenient and
10 improved apparatus for securely displaying PEZ® candy tablet dispensers and other items of similar shape and design.

It is a further object of the present invention to provide such display apparatus wherein the apparatus facilitates attaching and removing the dispensers or other items in a convenient manner.

15 It is a still further object of the present invention to provide such display apparatus with gripping clips wherein the clip itself stabilizes the attachment of the dispenser housing or other item with respect to the display board.

Brief Description of the Drawings

20 Fig. 1 is an elevational view of a display board illustrating the display of one type of PEZ® tablet dispenser in accordance with my invention.

Fig. 2 is a perspective view from the rear of the type of PEZ® tablet dispenser illustrated in Fig. 1, the dispenser being gripped by a first embodiment of a clip suitable for use in my invention.

25 Fig. 3 is a perspective view from the front of the tablet dispenser shown in Fig. 2.

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Fig. 4 is a top elevational view of the clip illustrated in Figs. 2 and 3.

Fig. 5 is a perspective view of a second embodiment of a clip suitable for use in my invention.

Fig. 6 is a top elevational view of the clip illustrated in Fig. 5.

5 Fig. 7 is a vertical sectional view of the tablet dispenser illustrated in Figs. 1, 2 and 3 being gripped by the clip illustrated in Fig. 4 and thereby attached to a display board.

Fig. 8 is a plan view partially in section of the dispenser and clip illustrated in Fig. 7.

10 Fig. 9 is a view, also partially in section, similar to Fig. 8, but illustrating the method of inserting the dispenser into the releasable gripping means of the clip illustrated in Fig. 4.

Fig. 10 is a perspective view of different type of candy dispenser being gripped by the type of clip illustrated in Figs. 5 and 6.

15 Fig. 11 is a perspective view of a still different type of candy dispenser for which the type of clip illustrated in Figs. 5 and 6 is suitable.

Detailed Description

Referring to the drawings, my invention comprises a display board 10 of any
20 desired shape suitable for displaying one type of fanciful PEZ® tablet dispenser 12 used to dispense PEZ® candies. The board 10 itself is preferably made of 6mm Sintra®

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expanded or foam polyvinyl chloride, a composite obtainable from Alcan Composites, 208 West Fifth Street, Benton, Kentucky. Holes or apertures 14 preferably 5 mm in diameter are punched or drilled in the board 10 at spacings chosen to display the dispenser 12 most effectively.

5 The PEZ® dispenser 122 is fully disclosed in U.S. Patents Nos. 4,295,579 and 4,966,305, and the texts and drawings thereof are, as previously mentioned, incorporated herein by reference. As such, each dispenser 12 comprises an exterior housing 16 (see Figs. 2, 3 and 7) having a dispensing end 18 (see Fig. 7) and further comprising a pair of side walls 20 joined by front and rear walls 22, 24 (see Figs. 2
10 and 3). Each of the front and rear walls 22, 24 comprises a centrally disposed protruding portion 26, 28 extending the vertical length of the housing 16 from its base 30 (see Figs. 2 and 7) to its dispensing end 18.

As shown in Fig. 7, a magazine or storage receptacle 32 is coaxially displaceable inside the housing 16. The storage receptacle comprises a dispensing end
15 and includes a coil spring 34 biased to press a stack of tablets 36 stored in the receptacle 32 upwardly towards the dispensing ends 18 of the receptacle 32 and the housing 16. As shown in Fig. 7, an uppermost tablet 36a rests against a bridge 37 having an extension 39 that act as a spring and achieves a dispensing position above the housing 16 and between the two upwardly extending side walls of the receptacle 32. A
20 cover 38 pivotally supported at the dispensing end of the receptacle 32 carries a handle 40 that may be operated by one finger of a hand, for instance the thumb, to pivot

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the cover 38 about a transverse axis defined by a pivot pin 44 to bring the cover 38 into an open position exposing the uppermost tablet 36*a* as it rests in the aforementioned dispensing position.

The cover 38 has a skirt 46 at the rear thereof and, on pivoting the cover 38, the skirt 46 passes between the two upwardly extending side walls of the receptacle 32 to engage the uppermost tablet 36*a* to push it forwardly between the upper edge 18 of the housing 16 and the lower edge of the bridge 37, thus enabling the tablet 36*a* readily to be removed from the dispenser 12. Upon releasing the finger from the handle 40, the cover 38 will return automatically to its closed position under the bias of the spring 39 (the aforementioned extension of the bridge 37). The coil spring 34 will then press the false bottom 48 upwardly to bring the succeeding tablet 36*b* to rest at the bridge 37.

As previously mentioned, the housing 16, tablet storage receptacle 32 and associated mechanism are all standard. It is the handle portion 40 that differs as between different dispensers. It is modeled to replicate cartoon and other fanciful figures (see Fig. 1), and that is what causes collectors to desire, to collect and to want to display them.

Each tablet dispenser 12 is removably attached to the board by a clip 50 which is releasably adapted to grip the exterior housing 16 of the dispenser. See Fig. 1.

A first embodiment of a clip 50*a* suitable for use in this aspect of my invention is illustrated in Figs. 1-4 and 7-9 and comprises a base portion 52 as well as the means to grip the exterior housing 16. In this first embodiment, the clip 50*a* comprises a pair

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of arms 54, 56 extending forwardly of the base portion 52. (In the description herein, directions are assumed to be relative to a viewer looking at a board 10 oriented vertically, that is, for example, mounted on a vertical surface.) Each arm 54, 56 extends the full width of the respective side wall 20 of the housing 16. Each arm comprises a gripping end 58 positioned, generally, at right angles to the respective arm 54, 56. Each gripping end 58 grips the front wall 22 of the housing 16 on each side of the forwardly protruding, centrally disposed protruding portion 26, as shown. When a collector desires to insert a tablet dispenser 12 into a clip 50a, the sloping side walls of the protruding portion 28 on the rear of the dispenser 12 (see Fig. 9) interact with the complementary slope of the gripping ends 58 to spread the arms 54, 56 apart, as shown in Fig. 9. Fig. 8, of course, illustrates the dispenser 12 fully inserted in the clip 50a. Inasmuch as the clip 50a is made of plastic, the arms 54, 56 can be easily spread apart to release the dispenser 12, when desired.

The clip 50a further comprises a press fit portion 60 extending rearwardly of the base portion 52. See Fig. 4. The press fit portion 60 comprises a central cylindrical stem 62 mounting four groups of six longitudinally oriented (that is, longitudinally oriented along the stem 62), integrally molded, generally rectangular, bendable planar fins 64. The fins extend a distance slightly larger than the diameter of the aperture 14 in the display board 10, such that when the stem 62 is pressed into the aperture 14, an interference fit is obtained. This securely attaches the clip 50a and the tablet dispenser 12 to the display board 10.

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A spring 66, comprising an arcuate member 68, is disposed between the press fit portion 60 of the clip 50*a* and the base portion 52 thereof. Again see Fig. 4. The arcuate member 68 has ends 70 that contact the forward surface 72 of the display board 10. See Figs. 8 and 9. In this manner the spring 66 is biased to urge the dispenser 12 away from the display board 10. This prevents rotation of the dispenser 12 with respect to the forward surface 72 of the display board 10 and thus, stabilizes its attachment thereto.

As shown in Figs. 4, 8 and 9, the arcuate member 68 comprises a pair of reliefs 74, one disposed on each side of the press fit portion 60 and adjacent the base portion 52 of the clip 50*a*. The reliefs 74 facilitate bending of the arcuate member 68 when the press fit portion 60 is pressed into the aperture 14 in the board 10.

The clip 50*a* shown in Figs. 1-4 and 7-9, is preferably molded in nylon 6/6 material and is obtainable from Micro Plastics, Inc., Highway 178th North, Flippin, Arkansas 72634, as its Item Number 22WHA500075 wire/cable holder.

A second embodiment of a suitable clip 50 is illustrated as clip 50*b* in Figs. 5 and 6.

Figs. 10 and 11 illustrate other types of PEZ® candy dispensers. These dispensers are particularly adapted to being held by the clip 50*b*. Fig. 10 illustrates a dispenser 12*a* in the form of a ball point pen. Other than its exterior shape, however, it functions the same as the dispenser 12 and albeit equipped with a differently designed handle mechanism 40*a*, it contains a similar interiorly disposed dispensing mechanism.

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As shown in Fig. 10, the clip 50*b*, like the clip 50*a*, is adapted releasably to grip or grasp the tablet dispenser 12*a* intermediate the base 30*a* and the dispensing end 18*a* of its housing 16*a*.

As shown in Figs. 5 and 6, the clip 50*b* comprises as its base member a first
5 curved member 76. A catch 78 is attached to one end 80 of the first curved member 76. A second curved member 82 is hingedly attached at one end 84 to the other end 86 of the first curved member 76. A hook 88 is disposed at the other end 90 of the second curved member 82. The hook 88 is adapted to engage and be retained by the catch 78 at the one end 80 of the first curved member 76. The first and second curved members 76.
10 82 enclose the tablet dispenser 12*a*, as shown in Fig. 10. Thus, by releasing the catch 78 from the hook 88, the tablet dispenser 12*a* can be inserted within or released from the clip 50*b* and thus, be retained by or removed from the display board 10.

The clip 50*b* also comprises a press fit portion 60*b* extending rearwardly of the base portion or first curved member 76. As in the case of the clip 50*a*, the press fit
15 portion 60*b* comprises a central cylindrical stem 62*b* mounting four groups of six longitudinally oriented, integrally molded, generally rectangular, bendable planar fins 64*b*. See Fig. 5. The fins 64*b* extend a distance slightly larger than the diameter of the aperture 14 in the display board 10, such that when the stem 62*b* is pressed into the aperture 14, the same interference fit is obtained. This securely attaches the clip 50*b*
20 and the tablet dispenser 12*a* to the display board 10.

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As shown in Figs. 5 and 6, a spring 66*b* comprising an arcuate member 68*b* is disposed between the press fit portion 60*b* of the clip 50*b* and the base portion, that is, the first curved member 76. The arcuate member 68*b* also has ends 70*b* that contact the forward surface 72 of the display board 10 as in the case of clip 50*a* illustrated in

5 Figs. 8 and 9. In this manner the spring 66*b* is also biased to urge the dispenser 12*a* away from the display board 10 while it is attached thereto. This also prevents rotation of the dispenser 12*a* with respect to the forward surface 72 of the display board 10 and thus, stabilizes its attachment thereto as in the case with dispenser 12 and clip 50*a*.

As shown in Figs. 5 and 6, the arcuate member 68*b* also comprises a pair of

10 reliefs 74*b*, one disposed on each side of the press fit portion 60*b* and adjacent the first curved member 76 or base portion of the clip 50*b*. The reliefs 74*b* facilitate bending of the arcuate member 68*b* when the press fit portion 60*b* is pressed into the aperture 14 in the board 10.

The clip 50*b*, illustrated in Figs. 5 and 6, is also molded in nylon 6/6 material

15 and may also be obtained from Micro Plastics, Inc., Flippin, Arkansas 72634.

The fins 64 and 64*b* of clips 50*a* and 50*b* are described as rectangular, but of course, they could be fabricated in other shapes as long as they create an interference fit with the aperture 14.

Fig. 11 illustrates a still further type of candy dispenser 12*b*. The dispenser 12*b*

20 is in the form of a flashlight. Again, other than its exterior shape, dispenser 12*b* functions the same as the dispensers 12 and 12*a*, but with a still differently shaped

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handle mechanism *40b*. The interiorly disposed dispensing mechanism, however, is substantially the same. As shown in Fig. 11, the clip *50b* is adapted releasably to grip or grasp the dispenser *12b* intermediate the base *30b* and the dispensing end *18b* of its housing *16b*.

- 5 As in the case of the dispenser *12a*, the curved members 76 and 82 of the clip *50b* enclose the dispenser *12b*. See Fig. 11. Similarly, by releasing the catch 78 from the hook 88, the tablet dispenser *12b* can be inserted within or released from the clip *50b* and thus, be retained by or removed from the display board 10.